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EXAMINER

UNELUS, ERNEST

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/829,007	Applicant(s) LEAMING, TAYLOR J.	
	Examiner Ernest Unelus	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
7/23/2006

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/30/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The instant application having Application No. 10/829,007 has a total of 35 claims pending in the application; there are 4 independent claims and 31 dependent claims, all of which are ready for examination by the examiner.

I. INFORMATION CONCERNING OATH/DECLARATION

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

II. INFORMATION CONCERNING DRAWINGS

Drawings

3. The applicant's drawings submitted are acceptable for examination purposes.

III. ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT

4. As required by M.P.E.P. 609(C), the applicant's submissions of the Information Disclosure Statement dated July 30, 2004 is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P 609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

IV. OBJECTIONS TO THE SPECIFICATION

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5. The abstract of the disclosure is objected to because the term "may" appears and makes the abstract seem indefinite (i.e. "An integrated circuit for a smart card may include a transceiver and a processor for communicating..." is indefinite because it is known whether the integrated circuit includes the transceiver or not). Correction is required. See MPEP â 608.01(b).

V. OBJECTIONS TO THE CLAIM

6. Claim 1 is objected to because of the following informalities: Regarding claim 1, lines 1-2: The preamble states "an integrated circuit for a smart card and comprising:" Please remove the "and" so that the sentence is grammatically correct. Appropriate correction is required.

VI. REJECTIONS BASED ON PRIOR ART

Double Patenting

7. Claims 1-7, 9-16, 18-25, and 27-35 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-8, 10-11, 13-18, 20-21, 23-28, 30-31, and 33-38 of copending Application No. 10/828,747 to Leaming, from hereinafter "747 application" in view of Tello (U.S. Patent No. 6,463,537).

Although the conflicting claims are not identical, they are not patentably distinct from each other because in claims 1-7, 9-16, 18-25, and 27-35 of the instant application, applicants claim an integrated circuit for a smart card comprising a transceiver and a processor for communicating with a host device via said transceiver, the processor providing at least one default descriptor to the host device, cooperating with the host device to perform an enumeration based upon the at least one default descriptor, and detecting a system event, and responsive to the system event, providing at least one alternate descriptor to the host device and cooperating with the host device to perform a new enumeration based thereon. The '747 application' discloses an integrated circuit for a smart card comprising a transceiver and a processor for communicating with a host device via a transceiver and performing a plurality of smart card applications wherein the processor cooperates with the host device to perform an enumeration based upon at least one default descriptor, generate a look-up table for allocating data to respective smart card applications based on the enumeration and detecting a system event, cooperating with the host device to perform a new enumeration based upon the alternate descriptor and generating a new look-up table based thereon. The instant application however, fails to teach the use of a look-up table to store information

Tello teaches a computer security system which utilizes an encrypted table of smart card code numbers are also stored in the flash memory of the security engine. This table is used during the operation of the invention to identify the purpose and type of smart card inserted in the smart card reader, which is logically connected to the security engine (see col. 9, lines 26-31). Hence, Tello teaches the use of a look-up table, which stores smart card information during smart card processes. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Tello to the instant application because both systems are teaching the interfacing of computers with other objects.

Thus, with respect to the above discussions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of claims 1-7, 9-16, 18-25, and 27-35 of the instant application, along with Tello as a general teaching for using the integrated circuit for the smart card as set forth in the '747 application'.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

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with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8 **Claim 1** is also provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/829,008.

9. Initially, it should be noted that the present application and Application No. 10/829,008, have the same inventive entity. The assignee for both applications is STMICROELECTRONICS, INC.

10. Claimed subject matter in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as noted below. *See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).*

11. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See MPEP § 804.

12. Claim 1 is compared to claims 3 of application 10/815,187 in the following table:

Instant Application	Application 10/829,008

<p>An integrated circuit for a smart card comprising; a transceiver; and a processor for communicating with a host device via said transceiver, said processor for providing at least one default descriptor to the host device, cooperating with the host device to perform an enumeration based upon the at least one default descriptor, and detecting a system event and, responsive to the system event, providing at least one alternate descriptor to the host device and cooperating with the host device to perform a new enumeration based thereon</p>	<p>An integrated circuit for a smart card and comprising: at least one data terminal for providing communications with a host device; and a processor for providing an attachment signal on the at least one data terminal for recognition by the host device, cooperating with the host device perform an enumeration based upon at least one default descriptor, and based upon a system event, selectively removing the attachment signal from the at least one data terminal and thereafter again providing the attachment signal on said at least one data terminal and cooperating with the host device to perform a new enumeration based upon at least one alternate descriptor.</p>
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This is a provisional double patenting rejection since the conflicting claims have not yet been patented. The double patenting rejection is also applicable to other claims in the instant application and 10/829,008.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. **Claims 1-18 and 28-35** are rejected under 35 U.S.C. 102(e) as being anticipated by Maier (US 2005/0251596) in view of Lu et al. 2005/0108571.

16. As per **claims 1, 10, and 28**, the following multiple reference 35 U.S.C. 102(e) rejections is made in reference to MPEP 2131.013.

Maier discloses “An integrated circuit for a smart card (**USB device in fig. 1**) and comprising: an input and output device; and a processing system for communicating with a host device (**USB host in fig. 1**) via the input and output device, said processing system for providing at least one default descriptor [**descriptors (I)**] to the host device (**see paragraph 0043**), cooperating with the host device to perform an enumeration based upon the at least one default descriptor (**paragraph 0043 discloses “in a first enumerating step ENUM1, the USB host will**

enumerate the USB device. In other words, as illustrated in FIG. 2, the USB host will retrieve from the USB device to the USB host only the descriptors (I) associated to the standard service S0 and to the mass storage service S1”), and detecting a system event and, responsive to the system event (see fig. 3), providing at least one alternate descriptor [descriptors (II)] to the host device and cooperating with the host device to perform a new enumeration based thereon [(paragraph 0043 discloses “in a second enumerating step ENUM2, the USB host enumerates the USB device. As illustrated in FIG. 2, only the descriptors (II) associated to the services (S1, S2, S3) which have been activated and the descriptor associated to the standard service (S0) will be retrieved”). Maier discloses the functionality of the smart card and fail to specifically discloses the structure of the card. However, it is an inherent feature for the smart card to be an integrated circuit having a transceiver, a processor and descriptors. For example, as evidence, Lu discloses, “An example of such a resource-constrained device is the smart card. A smart card is simply a plastic card containing an integrated circuit with some memory and a microprocessor. Typically the memory is restricted to 6K bytes of RAM. It is anticipated that smart card RAM may increase by a few kilobytes over the next few years. However, it is very likely that memory size will continue to be an obstacle to smart card applications. Most smart cards have 8-bit microprocessors”, and paragraph 0232 and fig. 11, which further illustrate a smart card having descriptors]

17. As per claims 2, 11, and 29,, Maier discloses “The integrated circuit of claim 1,” [See rejection to claim 1 above] “wherein the system event comprises a system utilization metric

exceeding a threshold” (with respect to this limitation, paragraph 0015 from the applicant’s specification discloses “In such case, the system utilization metric may indicate that bus utilization is above a threshold, which would prompt the processor to re-enumerate using one or more alternate descriptors that would allow it to more efficiently utilize the limited bandwidth”. Similarly, Maier discloses, in paragraph 0055, “in a second enumerating step ENUM2, the USB host enumerates the USB device. As illustrated in FIG. 2, only the descriptors (II) associated to the services (S1, S2, S3) which have been activated and the descriptor associated to the standard service (S0) will be retrieved”).

18. As per claims 3, 12, and 30, Maier discloses “wherein the system event comprises the occurrence of attempted unauthorized communications” (with respect to this limitation, paragraph 0048 from the applicant’s specification discloses “Another example of a system event which may trigger a new enumeration is the occurrence of attempted unauthorized communications, at Block 61’, such as would be the case when someone attempts to eavesdrop or hack into the system 20.”. Similarly, Maier discloses, in paragraph 0019, “In addition, an Internet Service Provider can, for example, define its own proprietary login application and store it on the Smart Card itself (USB device). The risk of hacking the login application is therefore reduced”).

19. As per claims 4, 13, and 31, Maier discloses “wherein the at least one alternate descriptor comprises at least one device descriptor (see paragraph 0008).

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20. As per claims 5, 14, and 32, Maier discloses “wherein the at least one alternate descriptor comprises at least one configuration descriptor (see paragraph 0009).

21. As per claims 6, 15, and 33, Maier discloses “wherein the at least one alternate descriptor comprises at least one interface descriptor (see paragraph 0010).

22. As per claims 7, 16, and 34, Maier discloses “wherein the at least one alternate descriptor comprises at least one endpoint descriptor (see paragraph 0011).

23. As per claims 8 and 17, Maier discloses “further comprising at least one memory connected to said processor for storing the at least one default descriptor and the at least one alternate descriptor (see paragraph 0013).

24. As per claims 9, 18, and 35, Maier discloses “wherein said transceiver comprises a universal serial bus (USB) transceiver” (fig.1 shows input/output information from the USB device, which means you must have a transceiver inside the card to accept the incoming information and to output information. Paragraph 0077 discloses the USB using different protocol such firewire, which is a Universal Serial Bus version 2.0 (USB), and wherein said processor operates in a USB mode (see fig. 1).

Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. **Claims 19-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier (US 2005/0251596) in view of Lu et al. 2005/0108571.

27. As per **claim 19**, Maier discloses “A smart card system (**USB device in fig. 1**) comprising: a host device (**USB host device in fig. 1**); comprising: an input and output device; and a processing system for communicating with a host device (**USB host in fig. 1**) via the input and output device, said processing system for providing at least one default descriptor [**descriptors (I)**] to the host device (**see paragraph 0043**), cooperating with the host device to perform an enumeration based upon the at least one default descriptor (**paragraph 0043 discloses “in a first enumerating step ENUM1, the USB host will enumerate the USB device. In other words, as illustrated in FIG. 2, the USB host will retrieve from the USB device to the USB host only the descriptors (I) associated to the standard service SO and to the mass storage service S1”**), and detecting a system event and, responsive to the system event (**see fig. 3**), providing at least one alternate descriptor [**descriptors (II)**] to the host device and cooperating with the host device to perform a new enumeration based thereon [(**paragraph 0043 discloses “in a second enumerating step ENUM2, the USB host enumerates the USB device. As illustrated in FIG. 2, only the descriptors (II) associated to the services (S1, S2, S3)**

which have been activated and the descriptor associated to the standard service (S0) will be retrieved”). Maier discloses the functionality of the smart card and fail to specifically discloses the structure of the card. However, it is an inherent feature for the smart card to be an integrated circuit having a transceiver, a processor and descriptors. For example, as evidence, Lu discloses, “An example of such a resource-constrained device is the smart card. A smart card is simply a plastic card containing an integrated circuit with some memory and a microprocessor. Typically the memory is restricted to 6K bytes of RAM. It is anticipated that smart card RAM may increase by a few kilobytes over the next few years. However, it is very likely that memory size will continue to be an obstacle to smart card applications. Most smart cards have 8-bit microprocessors”, and paragraph 0232 and fig. 11, which further illustrate a smart card having descriptors]. In regards to the adapter, Maier clearly fails to specifically disclose a card adapter connected to the host.

Lu discloses a card adapter connected to a smartcard comprising an integrated circuit (see paragraph 0004 and fig. 1)

Maier (US 2005/0251596) and Lu et al. (US 2005/0108571) are analogous art because they are from the same field of endeavor of communication between a smart card and a computer.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the system comprising a main device and an auxiliary device arranged to co-operate with each other as taught by Maier and an infrastructureless resource-constrained device, for example, a smart card, capable of acting as a full-fledged network node providing secure

communication to other nodes on the network and in which the security boundary is located on the infrastructureless resource-constrained device as taught by Lu

The motivation for doing so would have been because Lu teaches that determining whether there is enough free space in memory before transferring data [**“The smart card reader 215(6b) provides an implementation of the Peer I/O Server 613(6b), described in greater detail herein below. The smart card reader 215(6b) connects to the smart card 201(6b) through an ISO standard half-duplex I/O interface and to a host computer 217(6b) via a standard full-duplex I/O interface 607. Because the smart card reader 215(6b) completely handles the ISO 7816 protocol, and connects to the host computer 217(6b) using standard serial protocol, no additional software, beyond that which is normally found on a PC, is needed on the host PC 217(6b)”**].

Therefore, it would have been obvious to combine Maier (US 2005/0251596) and Lu et al. (2005/0108571) for the benefit of creating a smart card to communicate with a host to obtain the invention as specified in claim 19.

28. As per **claim 20**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “a system utilization metric exceeding a threshold” (with respect to this limitation, paragraph 0015 from the applicant’s specification discloses “In such case, the system utilization metric may indicate that bus utilization is above a threshold, which would prompt the processor to re-enumerate using one or more alternate descriptors that would allow it to more efficiently utilize the limited bandwidth”. Similarly, Maier discloses, in paragraph 0055, “in a second enumerating step ENUM2, the USB host enumerates the USB device. As illustrated in FIG. 2, only the

descriptors (II) associated to the services (S1, S2, S3) which have been activated and the descriptor associated to the standard service (S0) will be retrieved”).

29. As per **claim 21**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “wherein the system event comprises the occurrence of attempted unauthorized communications” **(with respect to this limitation, paragraph 0048 from the applicant’s specification discloses “Another example of a system event which may trigger a new enumeration is the occurrence of attempted unauthorized communications, at Block 61’, such as would be the case when someone attempts to eavesdrop or hack into the system 20.”. Similarly, Maier discloses, in paragraph 0019, “In addition, an Internet Service Provider can, for example, define its own proprietary login application and store it on the Smart Card itself (USB device). The risk of hacking the login application is therefore reduced”).**

30. As per **claim 22**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “wherein the at least one alternate descriptor comprises at least one device descriptor” **(see paragraph 0008).**

31. As per **claim 23**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “wherein the at least one alternate descriptor comprises at least one configuration descriptor” **(see paragraph 0009).**

32. As per **claim 24**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “wherein the at least one alternate descriptor comprises at least one interface descriptor” (see paragraph 0010).

33. As per **claim 25**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “wherein the at least one alternate descriptor comprises at least one endpoint descriptor” (see paragraph 0011).

34. As per **claim 26**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “wherein said integrated circuit further comprises at least one memory connected to said processor for storing the at least one default descriptor and the at least one alternate descriptor” (see paragraph 0013).

35. As per **claim 27**, the combination of Maier and Lu discloses “The smart card system of claim 19,” [See rejection to claim 19 above] Maier further discloses “wherein said transceiver comprises a universal serial bus (USB) transceiver (**fig.1 shows input/output information from the USB device, which means you must have a transceiver inside the card to accept the incoming information and to output information. Paragraph 0077 discloses the USB using different protocol such firewire, which is a Universal Serial Bus version 2.0 (USB), and wherein said host device and said processor operate in a USB mode (see fig. 1).**”).

VII. RELEVANT ART CITED BY THE EXAMINER

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36. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See MPEP 707.05(c).

37. The following reference teaches a USB smart card in communication with a USB host.

U.S. PATENT NUMBER

US 2001/0056539

US 5,568,179

VIII. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

38. The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. 707.07(i):

a(1) CLAIMS REJECTED IN THE APPLICATION

39. Per the instant office action, claims 1-35 have received a first action on the merits and are subject of a first action non-final.

b. DIRECTION OF FUTURE CORRESPONDENCES

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

IMPORTANT NOTE

42. If attempts to reach the above noted Examiner by telephone is unsuccessful, the Examiner's supervisor, Mr. Fritz M. Fleming, can be reached at the following telephone number:
Area Code (571) 272-4145.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

July 18, 2006

Ernest Unelus
Examiner
Art Unit 2181